

**Dakota STEP**  
**Science Formula Sheet**

<b>Equation</b>	<b>Variables</b>
$v = \frac{d}{t}$	$v$ = velocity $d$ = displacement $t$ = time interval
$W = F \times d$	$W$ = work $F$ = force $d$ = displacement
$P = \frac{W}{t}$	$P$ = power $W$ = work $t$ = time interval
$a = \frac{\Delta v}{\Delta t}$	$a$ = acceleration $\Delta v$ = change in velocity $\Delta t$ = change in time
$F = ma$	$F$ = force $m$ = mass $a$ = acceleration
$PE = mgh$	$PE$ = gravitational potential energy $m$ = mass $g$ = acceleration due to gravity $h$ = height
$KE = \frac{1}{2}mv^2$	$KE$ = kinetic energy $m$ = mass $v$ = velocity
$v = \lambda f$	$v$ = wave velocity $\lambda$ = wavelength $f$ = frequency
$I = \frac{V}{R}$	$I$ = current $V$ = potential difference $R$ = resistance